REMARKS

A. 35 U.S.C. § 112, Second Paragraph

In the Office Action of November 18, 2004, claims 14-38 were rejected under 35 U.S.C. § 112, second paragraph, for being indefinite. In particular, claims 14 and 25 were rejected because it was unclear how the recited transmitting unit could have a radiation sensitive layer region. Claims 14 and 25 have been canceled and so the rejection has been rendered moot and should be withdrawn.

Claims 14 and 25 were also rejected because it was unclear how the recited receiving unit could have a radiation emitting layer region. Claims 14 and 25 have been canceled and so the rejection has been rendered moot and should be withdrawn.

Note that claims 18 and 29 have been amended to be in independent form and to incorporate elements recited in claims 14 and 25. Claims 18 and 29 fail to include the offending phrases and so the rejection does not apply to claims 18 and 29, as amended, and their dependent claims 15-17, 19-21, 24, 26-35 and 38.

B. 35 U.S.C. § 102

1. Claims 14-16 and 18-24

Claims 14-16 and 18-24 were rejected under 35 U.S.C. §102(e) as being anticipated by Kuhara et al. Claims 14, 22 and 23 have been canceled rendering their rejections moot. Regarding the remaining claims, claim 18 has been amended to be in

independent form and claims 15, 16 and 17-24, pursuant to the present Amendment, now depend directly or indirectly on claim 18. Claim 18 recites an optoelectronic transmitting unit disposed on a substrate and electrically connected to an electrical conductor track of the substrate. Claim 18 further recites an optoelectronic receiving unit disposed in bridge-like fashion above the optoelectronic transmitting unit and electrically connected to a second electrical conductor track of the substrate. The Office Action relies in part on the embodiments of FIGS. 10-15, 19, 21A, 23 and 24A as disclosing the claimed transmitting and receiving units. However, Kuhara et al. fails to disclose that the components relied on as transmitting and receiving units are electrically connected to separate conductor tracks of a common substrate. Accordingly, the embodiments of FIGS. 10-15 do not anticipate claim 18 and its dependent claims 15, 16, 19-21 and 24.

The Office Action also relies on the embodiments of FIGS. 19 and 21 as anticipating the claims. However, the photodiode 64 is electrically connected to lead pin 114 while laser chip 70 appears to be solely attached to header 111. There is no common electrical connection for the photodiode 64 and laser chip 70 via submount 120 since submount 120 is coated with an insulator. Since photodiode 64 and laser chip 70 are not electrically connected to a common substrate, claim 18 is not anticipated by the embodiments of FIGS. 19 and 21 of Kuhara et al.

Regarding the embodiment of FIG. 23 and 24A, claim 18 further recites an

optoelectronic receiving unit "disposed in bridge-like fashion above said optoelectronic transmitting unit along a common optical axis via a spacer attached to said substrate so that said optoelectronic receiving unit is spaced from said substrate." In contrast, laser chip 70 directly contacts the common support that supports photodiode and lens 170 and is not spaced from the support via a spacer. Since laser chip 70 is not spaced from the common support via a spacer, claim 18 is not anticipated by the embodiments of FIGS. 23 and 24A of Kuhara et al.

As mentioned above, claim 18 has been amended to be in independent form. For those portions added to claim 18 that were inherently present in original claim 18, the amendments are not related to patentability as defined in *Festo Corporation v. Shoketsu Kinzoku Kogyo Kabushiki Co., Ltd*, 535 U.S. 722 (2002). (hereinafter *Festo II*).

Claims 15, 19 and 24 have been amended so as to depend from claim 18 and are being presented to provide additional coverage for the optoelectronic receiver of claim 18. Accordingly, the amendments of claims 15, 19 and 24 are not being presented for reasons of patentability as defined in *Festo Corporation v. Shoketsu Kinzoku Kogyo Kabushiki Co., Ltd*, 234 F.3d 558, 56 USPQ2d 1865 (Fed. Cir. 2000) (*en banc*), *overruled in part*, 535 U.S. 722 (2002). (hereinafter *Festo I*).

2. Claims 25-27 and 29-38

Claims 25-27 and 29-38 were rejected under 35 U.S.C. §102(e) as being anticipated by Kuhara et al.[1] Claims 25, 36 and 37 have been canceled rendering their rejections moot. Regarding the remaining claims, claim 29 has been amended to be in independent form and claims 26, 27, 30-32 and 38, pursuant to the present Amendment, now depend directly or indirectly on claim 29. Claim 29 recites a radiation transmission system that includes an optoelectronic transmitting unit disposed on a substrate and electrically connected to an electrical conductor track of the substrate. Claim 29 further recites an optoelectronic receiving unit disposed in bridge-like fashion above the optoelectronic transmitting unit on the substrate and electrically connected to a second electrical conductor track of the substrate. As pointed out in Section B.1, the embodiments of FIGS. 10-15, 19 and 21 of Kuhara et al. do not disclose the recited optoelectronic transmitting and receiving units.

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[1] It is noted that the Office Action lists claim 28 as being anticipated by Kuhara et al. However, the same Office Action rejects claim 28 under Section 103. In view of this contradiction, Applicants will treat claim 28 as being rejected under Section 103 and not Section 102.

Regarding the embodiment of FIG. 23 and 24A, claim 29 further recites an optoelectronic receiving unit "disposed in bridge-like fashion above said optoelectronic transmitting unit along a common optical axis via a spacer attached to said substrate so that said optoelectronic receiving unit is spaced from said substrate." As pointed out in Section B.1, the embodiments of FIGS. 23 and 24A of Kuhara et al. do not disclose the recited bridge-like structure. For the reasons given above, the rejection has been overcome and should be withdrawn.

As mentioned above, claim 29 has been amended to be in independent form. For those portions added to claim 29 that were inherently present in original claim 18, the amendments are not related to patentability as defined in *Festo II*.

Claims 26, 30-32 and 38 have been amended so as to depend from claim 29 and are being presented to provide additional coverage for the radiation transmission system of claim 29. Accordingly, the amendments of claims 26, 30-32 and 38 are not being presented for reasons of patentability as defined in *Festo I*.

C. 35 U.S.C. §103

1. Claim 17

Claim 17 was rejected under 35 U.S.C. §103 as being obvious in view of Kuhara et al. and Bucholz. Claim 17 depends indirectly on claim 18. As pointed out in Section B.1, Kuhara et al. fails to disclose an optoelectronic transmitting unit disposed on a

substrate and electrically connected to an electrical conductor track of the substrate and an optoelectronic receiving unit "disposed in bridge-like fashion above said optoelectronic transmitting unit along a common optical axis via a spacer attached to said substrate so that said optoelectronic receiving unit is spaced from said substrate." Bucholz does not cure the deficiencies of Kuhara et al. since it does not suggest altering Kuhara et al. to include an optoelectronic transmitting unit disposed on a substrate and electrically connected to an electrical conductor track of the substrate and an optoelectronic receiving unit disposed in bridge-like fashion above the optoelectronic transmitting unit in the manner recited in claim 18. Without such suggestion, the rejection is overcome and should be withdrawn.

2. Claim 28

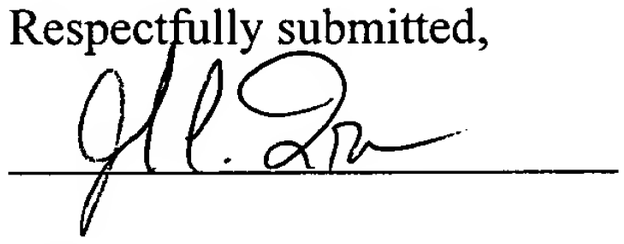
Claim 28 was rejected under 35 U.S.C. §103 as being obvious in view of Kuhara et al. and Bucholz. Claim 28 depends indirectly on claim 29. As pointed out in Section B.2, Kuhara et al. fails to disclose an optoelectronic transmitting unit disposed on a substrate and electrically connected to an electrical conductor track of the substrate and an optoelectronic receiving unit "disposed in bridge-like fashion above said optoelectronic transmitting unit along a common optical axis via a spacer attached to said substrate so that said optoelectronic receiving unit is spaced from said substrate." Bucholz does not cure the deficiencies of Kuhara et al. since it does not suggest altering

Kuhara et al. to include an optoelectronic transmitting unit disposed on a substrate and electrically connected to an electrical conductor track of the substrate and an optoelectronic receiving unit disposed in bridge-like fashion above the optoelectronic transmitting unit in the manner recited in claim 29. Without such suggestion, the rejection is overcome and should be withdrawn.

CONCLUSION

In view of the arguments above, Applicants respectfully submit that all of the pending claims 15-21, 24, 26-35 and 38 are in condition for allowance and seek an early allowance thereof. If for any reason, the Examiner is unable to allow the application in the next Office Action and believes that an interview would be helpful to resolve any remaining issues, he is respectfully requested to contact the undersigned attorneys at (312) 321-4200.

Respectfully submitted,



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Dated: January 27, 2005